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20.(New) A drainage device according to claim 19, wherein the geotextile fibrous materials consists of at least one hydrophilic layer and one hydrophobic layer.

REMARKS:

Regarding the objection to the title of the application:

The applicant has no objections to the Examiner's proposed title of the application, and would be obliged if the proposed title could be entered by Examiner's Amendment.

Regarding the objections to the Abstract:

The applicant's amendment to the Abstract entered herein is believed to fully respond to the Examiner's objections.

Regarding the objections to the claims:

The applicant enters amendments to claims 3 and 8 in accordance with the Examiner's suggestion.

The applicant respectfully disagrees with the Examiner's remarks concerning claim 10 as it is believed that the dependency of this claim on claim 8 resolves the sequence of the steps being practiced.

The applicant has amended claims 11, 12 and 15 in order to respond to the Examiner's objections.

Regarding the rejection of claims 1-8, and 10 – 15 under 35 USC 103(a) in view of WO 98/24738 in view of US 3858400 to Bernold:

The applicants respectfully traverse the rejection lodged by the Office in view of these two prior art documents.

Turning to WO 98/24738, therein is described a waterproof concrete structure for cladding having a waterproofing membrane, applied by spraying, between two layers of concrete. This membrane is described as being of a plastic material or of coalesced particles of a thermoplastic polymer. Significantly WO 98/24738 does not have, nor

mentions, any drainage means. In fact, a reading of WO 98/24738 indicates that at best, only a waterproofing layer, along with various compositions, is claimed.

With respect now to US Patent No. 3,858,400 to Bernold, therein is described a cladding construction for use in tunnel boring which includes reinforcement mats. Such reinforcement mats are meant to provide physical/structural reinforcement, but are not directed to be flow-directing means for channeling away liquids, viz., water. While advantageous in some respects, Bernold however, does not drainage, nor does Bernold discuss in his specification and drawings, the use of the present applicant's invention which includes a drainage means, particularly a plastic mesh connected to a sump. Bernold's perforated drainage tubes (18) are placed within reinforcing angle irons (5) of his reinforcing mats. In addition, the drainage means is sandwiched solely between two layers of concrete. Bernold does not provide the type construction provided by the applicants, nor could Bernold function in the manner taught by the present applicants in providing useful flow-directing means for channeling away liquids, away from an excavated subterranean surface (or other 'leaky' surface).

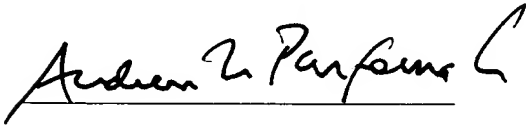
The applicants believe that notwithstanding the position taken by the Examiner, their invention remains non-obvious over the prior art of record.

Even if one skilled in the art were to combine the drainage means of the Bernold with the sprayable membrane of the WO document, the resultant "structure" would not function. The membrane of the WO structure applied onto Bernold's drainage means, would in fact, defeat any drainage from the tubes of the WO structure. Sprayable membranes have good waterproof properties but are likely to be ineffective with running water. In addition, any water that escapes the drainage system may travel down the sprayable membrane, causing a leak, not in the area of the problem, but might channel over a significant distance, again resulting in damage. Alternately it is the applicant's view that even if one were to combine these two prior art references, the drainage tubes described in the US patent to Bernold in addition a waterproofing membrane of the WO publication would not amount to the innovative "sandwich" drainage means, specifically the "multi-layered structure comprising a plastic mesh, intermediate at least partially waterproof layer and at least one fibrous layer." None of the prior art speaks of fibrous

layers, especially not in use with its drainage means, in the form of geotextile fibres, specifically one hydrophilic and one hydrophobic layer.

Should the Office believe that telephonic communication would advance the prosecution of the instant application, they are invited to telephone the undersigned at the number given below.

Respectfully Submitted:

A handwritten signature in black ink, reading "Andrew N. Parfomak", with a stylized flourish at the end. The signature is written over a horizontal line.

Andrew N. Parfomak, Esq.
Reg.No. 32,431
Tel: (212) 641-2285

Fish + Richardson P.C.
45 Rockefeller Center
Suite 2800
New York, N.Y. 10111

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Appendix

In the Abstract:

Versions showing amendments to the abstract:

“A cladding for a partially-overhanging substrate, such as a tunnel wall which comprises in sequence, from the tunnel wall, a drainage layer [means], a sprayed polymeric membrane and a final layer of concrete. The cladding gives an effective cladding in conditions where the tunnel walls suffer from running water at the time of cladding, is easier to apply and requires less material.”

In the Claims:

Version showing amendments to the claims:

3.(Twice Amended) A cladding according to claim 1 wherein the drainage means is a plastics mesh.[to that side of which remote from the substrate is applied on at least partially waterproof layer.]

8.(Twice Amended) A method of providing a waterproof cladding on a partially-overhanging substrate, comprising the application to the substrate [of] the following elements in sequence;
a drainage means;
a waterproofing membrane, applied by spraying; and
a layer of concrete.

11.(Amended) A method of providing a waterproof cladding on a partially-overhanging substrate according to claim 8, wherein the drainage means is a

plastics mesh [to that side of which remote from the substrate is applied on at least partially waterproof layer].

- 12.(Amended) A method of providing a waterproof cladding on a partially-overhanging substrate according to claim 8, wherein the waterproofing membrane is a sprayed plastics material [applied by spraying and whose] having a surface [is] configured so that anchoring means for subsequently-applied layers is provided.
13. A method of providing a waterproof cladding on a partially-overhanging substrate according to claim 8, wherein the waterproofing membrane is a layer of coalesced particles of thermoplastic polymer formed from a sprayed aqueous dispersion.
14. A method of providing a waterproof cladding on a partially-overhanging substrate according to claim 8, wherein the layer of concrete is applied by spraying.
- 15.(Amended) A method of providing a waterproof cladding on a partially-overhanging substrate according to claim 8, wherein the [sprayed] concrete comprises reinforcing fibres.

The following new claims have been added to the application:

- 16.(New) A waterproof cladding construction according to claim 1, which further comprises a fastening means used to secure said waterproofing membrane to said drainage means.
- 17.(New) A method of providing a waterproof cladding on a partially-overhanging substrate according to claim 8, which further comprises the step of securing said waterproofing membrane to said drainage means by a fastening means.

- 18.(New) A drainage device consisting of a multi-layered structure comprising:
a plastics mesh;
an at least partially waterproof layer, applied by spraying; and,
a fibrous layer.
- 19.(New) A drainage device consisting of a multi-layered structure comprising:
layers of geotextile fibrous materials;
a waterproof film, wherein said film is located between said layers of
geotextile fibrous materials.
- 20.(New) A drainage device according to claim 19, wherein the geotextile fibrous
materials consists of at least one hydrophilic layer and one hydrophobic
layer.